MADGETECH
WE BUILD DATA LOGGERS

Product Information Card

QuadState and OctState

Part Number	QuadState	OctState
Input Range	0 to 12VDC continuous; (0 to 30VDC peak)	
Input Low	<0.4V	
Input High	>2.7V	
Internal Weak Pull-Up	<500µA	
Recommended Duty Cycle for Inputs Greater Than 12VDC (over 1 minute interval)	18V: <50% 24V: <25% 30V: <10%	
Resolution	1 second	
Channels	4	8
Memory	52,428 states	
Sample Rate	1 second to 12 hours	
LED Indicator	None	
Required Interface Package	IFC110 or IFC200	
Baud Rate	2,400	
Typical Battery Life	1 year	
Operating Environment	-20 to +60°C, 0 to 95%RH (non–condensing)	
Material	Anodized aluminum	
Dimensions	3.5" x 4.4" x 1.0" (89mm x 112mm x 26mm)	3.5" x 4.4" x 1.5" (89mm x 112mm x 39mm)
Approvals	-	

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 60°C (140°F).

QuadState
4-Channel State Data Logger

OctState
8-Channel State Data Logger

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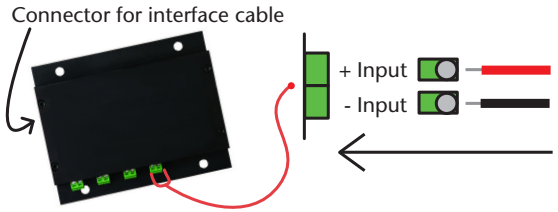
1.888.610.7664 www.calcert.com sales@calcert.com

Wiring the Data Logger

Wiring Options

The QuadState and OctState both have a two-position removable screw terminal connection. They accept 2-wire configurations.



Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.

Product Notes

Engineering Units

Engineering units are used to convert one measurement reading to another. The MadgeTech software allows for software level Engineering Units (conversion applied to data after download). Certain devices have device level Engineering Units, which upon download automatically appear in the chosen unit of measure.

Please refer to the app note "Engineering Units", found on the MadgeTech website, for information on how to manage Engineering Units. Also view the Engineering Units Video for step-by-step setup instructions.

Installation Guide

Installing the Interface cable

- IFC200
  Insert the device into a USB port. The drivers will install automatically.
- IFC110
  Plug the serial cable into the port and verify it is secure.

Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the **Communication Menu**, then **Auto Configure Port**.
- After a moment, a box will appear stating a device has been found.
- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for the logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to the "Data Logger & Software Operating Manual".

Device Operation

Starting the data logger

- Click **Device Menu** then **Start Device**.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for the application.
- Enter in any other desired parameters and click **Start**.
- A box will appear stating the data logger has been started. Click **OK**.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Connect the data logger to the interface cable.
- Click the **Device Menu** then **Read Device Data**. This will offload all recorded data onto the PC.

Device Maintenance

Battery Replacement

Materials:

3/32" HEX Driver (Allen Key)

Replacement Battery (U9VL-J)

- Remove the cover from the device by unscrewing the four screws.
- Remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and verify it is secure.
- Replace the cover taking care not to pinch the wires. Screw the enclosure back together securely.

Note: Be sure not to over tighten the screws or strip the threads.

Recalibration

The QuadState or OctState cannot be calibrated. A certificate of conformance can be provided.